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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/069,395 | 04/03/2002 | Hideki Hisada | 112061 | 3631 |
| 7590 | 08/11/2004 | | EXAMINER | |
| Oliff & Berridge PO Box 19928 Alexandria, VA 22320 | | | | SMITH, TYRONE W |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2837 | |

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|----------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/069,395 | HISADA ET AL. | |
| | Examiner Tyrone W Smith | Art Unit 2837 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 01 June 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,3,4 and 11-29 is/are rejected.
- 7) Claim(s) 5-10 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

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Attachment(s)

| | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 4 and 11-29 rejected under 35 U.S.C. 103(a) as being unpatentable over Koide et al (5934395) in view of Tsuzuki et al (6018198) and Yamaguchi et al (6546319).

Regarding Claims 1-4, 11, 16-21, 25-27, 28 and 29. Koide discloses a hybrid vehicle drive system, which includes a first electric motor (Figure 2 item 16) that raise an engine to a speed for an ignition (abstract; column 8 lines 14-67 and column 8 lines 1-8). However, Koide does not disclose the control unit performing prepositioning control for controlling the electric motor so that the engine is positioned at a predetermined crankshaft position when stopped.

Tsuzuki discloses a hybrid drive apparatus for a vehicle which includes an electric control unit (Figure 1 item 5) for controlling the engine (Figure 1 item 1) and the electric motor (Figure 1 item 40), where the control unit perform preposition control for controlling the first electric motor with a torque output so that the engine is positioned at a predetermined crankshaft position when stopped (abstract; column 2 lines 33-67, column 3 lines 1-61, column 10 lines 9-67). However, neither Koide nor Tsuzuki disclose causing an electric motor to output a torque short of a torque necessary for running the engine continuously.

Yamaguchi discloses a control apparatus and control method for hybrid vehicle that includes an engine (Figure 1 item 11), first and second motor (Figure 1 item 16 and 25) and

torque control means (Figure 1 item 93). Yamaguchi's invention causes the electric motor(s) to output a torque short of a torque necessary for running the engine continuously. Refer to the abstract, column 1 lines 53-60, column 2 lines 6-25, column 5 lines 55-67, column 6 lines 1-10, and column 20 lines 39-53.

It would have been obvious to one of ordinary skill in the art at the time of invention to use Koide's hybrid vehicle drive system with Tsuzuki's a hybrid drive apparatus for a vehicle and Yamaguchi discloses a control apparatus and control method for hybrid vehicle. The advantage of combining the inventions would provide a system capable of making a cranking characteristic at the restart of the engine constant so that the engine is restarted with a good response under a simple control in a state where the vehicle is driven by the motor generator.

Regarding Claim 12-15 and 22-24. Koide discloses a first and second electric motor (Figure 2 items 16 and 22) mechanically connected to the wheel and the control unit controls the second electric motor to absorb a fluctuation in the torque to be outputted to the wheel (column 8 lines 14-67 and column 9 lines 1-65). Tsuzuki discloses a hybrid drive apparatus for a vehicle which includes an electric control unit (Figure 1 item 5) for controlling the engine (Figure 1 item 1) and the electric motor (Figure 1 item 40), where the control unit performs preposition control for controlling the first electric motor with a torque output so that the engine is positioned at a predetermined crank-shaft position when stopped (abstract; column 2 lines 33-67, column 3 lines 1-61, column 10 lines 9-67).

It would have been obvious to one of ordinary skill in the art at the time of invention to use Koide's hybrid vehicle drive system with Tsuzuki's a hybrid drive apparatus for a vehicle and Yamaguchi discloses a control apparatus and control method for hybrid vehicle. The advantage of combining the inventions would provide a system capable of making a cranking

characteristic at the restart of the engine constant so that the engine is restarted with a good response under a simple control in a state where the vehicle is driven by the motor generator.

Applicant has provided evidence in this file (June 1, 2004) showing that the invention was owned by, or subject to an obligation of assignment to, the same entity as Yamaguchi et al (6546319) at the time this invention was made. Accordingly, Yamaguchi et al (6546319) is disqualified as prior art through 35 U.S.C. 102(e), (f) or (g) in any rejection under 35 U.S.C. 103(a) in this application. However, the foreign priority document is not perfected unless the applicant has filed a certified priority document in the application and an English language translation, if the document is not in English (see 37 CFR 1.55(a)(3) and the examiner established that the priority document satisfies the enablement and description requirements of 35 U.S.C. 112 1st Paragraph. The Applicant must submit an English language translation of the priority art document. Refer to M.P.E.P 201.13 and 706.02(b).

3. Claims 5-10 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Amendment-Arguments

4. Applicant's arguments filed June 1, 2004 have been fully considered but they are not persuasive. Examiner's explanation of continued rejection is disclosed above, but to reiterate the Applicant has provided evidence in this file showing that the invention was owned by, or subject to an obligation of assignment to, the same entity as Yamaguchi et al (6546319) at the

time this invention was made. Accordingly, Yamaguchi et al (6546319) is disqualified as prior art through 35 U.S.C. 102(e), (f) or (g) in any rejection under 35 U.S.C. 103(a) in this application. However, the foreign priority document is not perfected unless the applicant has filed a certified priority document in the application and an English language translation, if the document is not in English (see 37 CFR 1.55(a)(3) and the examiner established that the priority document satisfies the enablement and description requirements of 35 U.S.C. 112 1st Paragraph. The Applicant must submit an English language translation of the priority art document. Refer to M.P.E.P 201.13 and 706.02(b).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

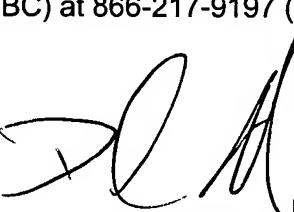
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tyrone W Smith whose telephone number is 571-272-2075. The examiner can normally be reached on weekdays from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin, can be reached on 571-272-2800 ext. 37. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tyrone W. Smith
Patent Examiner
Art Unit 2837



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